DOCUMENT RESUME

ED 472 817 CS 511 690

AUTHOR	Aune, Adonica Schultz; Lim, Dan
TITLE	The McLuhan Global Classroom: A Singapore-U.S. One-Year Instructional Interaction.
PUB DATE	2002-00-00
NOTE	24p.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	*Certification; Cooperative Learning; Educational Environment; *Educational Technology; Foreign Countries; *Global Approach; Higher Education; *Internet; Online Courses; Outcomes of Education; Problem Based Learning; Summer Programs; Technology Integration
IDENTIFIERS	Interactive Teaching; Singapore; University of Minnesota

ABSTRACT

WebCT was integrated and modeled in a global Instructional Technology (IT) Certification Summer Institute offered through the University of Minnesota. Courses were first introduced with an on-site certification where technology integration was modeled in each course through the use of highly interactive web-based learning applications and games authored in Flash and Toolbook. The United States and Singapore participants achieved the intended learning outcomes through (1) the modeling of technology integration; (2) the constructivist learning environment; (3) collaborative learning; (4) problem-based learning; as well as (5) the experience of online learning. After five weeks on-site, individual real-world projects were assigned in each course for the remaining full IT certification. Through synchronous and asynchronous communication, projects continued. East and West viewpoints are underscored and emphasized in creating a quality Instructional Technology Certification program that addresses global online instruction and corresponding needs. Includes 11 notes. Cites 20 works. Attached is a student survey. (NKA)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 472 817

Dr Adonica Schultz Aune
Adjunct Professor
School of Communication
University of North Dakota
PO Box 7169
Grand Forks, North Dakota, 58202
USA

adonica.schultz@nodak.und.edu

Phone: +701 746 9917

Dr Dan Lim
Assistant Professor of Information Technology Management
Director of Instructional Technology Center
University of Minnesota, Croo[illegible]ton
2900 University Avenue
Crookston, MN 56716
USA

dlim@mail.crk.umn.edu

Phone: +218 281 8382

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

A.S. Aune

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

CS 511 690

Adonica Schultz Aune

Adjunct Professor
School of Communication
University of North Dakota

Before taking her appointment teaching communication and education courses at the University of North Dakota, USA, Dr Adonica Schultz Aune taught campus and online English Writing Composition through the University of Minnesota, Crookston. Her interest in multicultural education began in 1993 when she taught on a Native American reservation in North Dakota. She then, in 1994, served as an English Expert in Hefei University of Technology's Foreign Language Department in Hefei, Peoples Republic of China. Following that, she taught English as a Second Language at Christian Invention Computer College in Seoul, Korea. She also served as an Aviation English Teaching Consultant in Taipei, Taiwan from 1997 to 1999. Her most recent publication is *Ambiguity in the International Airway* published in 2001 by ERIC Document Reproduction Service (No. ED 458 629).

Dan Lim

Assistant Professor of Information Technology Management
Director of Instructional Technology Center
University of Minnesota, Crookston

A certified instructional designer, he is a frequent presenter and speaker at national and international technology conferences in North America, Asia, Europe, Australia, and South America. He has published in the areas of paperless learning, constructivist learning, interactive learning games, technology cultural change, and ubiquitous laptop computing. His most recent research and development is the creation of an academic gaming portal where educators from around the world can create Flash learning games. He has taught computer courses at the University of Minnesota, Crookston and instructional design graduate courses at the University of North Dakota.

The McLuhan Global Classroom: A Singapore-U.S. One-Year Instructional Interaction

Main Description

WebCT was integrated and modelled in a global Instructional Technology Certification Summer Institute offered through the University of Minnesota. Courses were first introduced with an on-site certification where technology integration was modelled in each course through the use of highly interactive web-based learning applications and games authored in Flash and Toolbook. The U.S. and Singapore participants in the Summer Institute of Instructional Technology achieved the intended learning outcomes through (a) the modelling of technology integration, (b) the constructivist learning environment, (c) collaborative learning, (d) problem-based learning, as well as (e) the experience of online learning. After five weeks on-site, individual real-world projects were assigned in each course for the remaining full IT certification. Through synchronous and asynchronous communication, projects continued. East and West viewpoints are underscored and emphasized in creating a quality Instructional Technology Certification program that addresses global online instruction and corresponding needs.

Short Description

This work explores the experience of instructors from Singapore and from Crookston, Minnesota, USA who met at a Summer Institute for Instructional Technology where outcomes suggest that the Internet may be the equalizer for East/West academic interchange.

Keywords

Collaborative Learning
Constructivist Learning
Education for Online Instructors
Instructional Interaction
Instructional Technology
Instructional Technology Certification
Modelling of Instructional Integration
Multicultural Education
Online Learning
Pedagogy
Problem-Based Learning
WebCT

Person as Subject

Lim, Dan

Organization as Subject

Institute of Technical Education
University of Minnesota

Place as Subject

Singapore
Crookston, Minnesota, United States

THE McLUHAN GLOBAL CLASSROOM:

A SINGAPORE – U.S. ONE-YEAR INSTRUCTIONAL INTERACTION

INTRODUCTION

Yes, teachers watch time march on and vantage points change. I[1] admit that I was fascinated by the screen back in '89. That was the year that I finished my thesis entitled *Electronic Learning: The Marriage of Composition and Television.* Marshall McLuhan (1962, 1964, 1967, 1972) was an icon for me, but even he didn't have a clue as to how far the screen would take us.[2]

My question in 1989 was how many secondary teachers in the small state of North Dakota used television or the screen in the English composition classroom. At that time, any movie or video seemed to be "fun" for most classrooms and not taken seriously. My findings were that 40% of the teachers in North Dakota had used the screen to study composition at least once. Other secondary composition teachers in North Dakota had never used the screen in their composition classrooms.

My interest in screens grew. I became more interested in the screen while teaching in Asia, far from home. The screen was the computer that became an umbilical cord for me. Yet, I did not know that technology would become a major interest in my teaching and in my life. As my life, technology in teaching developed quickly and inconsistently. I observed that not every teacher/trainer/student had access to computers, and on further observation I noted that educators did not have the professional development necessary to use technology in the classroom effectively.

Not only that, "Students who move through the educational system without having access to technology not only are limited in the ways they can approach traditional academic subjects; they are also missing out on experiences that would enhance their future ability to work and learn in a world more and more dependent on technology" (Grabe & Grabe, 2001: 409).

---

[1] Dan Lim co-authored this material and much of the work is by his hand. I (Adonica) have taken the liberty of using first person in order for the reader to better feel part of the experience and also for reading ease.

[2] McLuhan is an icon for many. *Wired,* a widely read technological periodical, has adopted McLuhan as its patron saint.

This concern for instructional technology is not only apparent in the United States. Studies on assessing student perceptions of online environments have developed in Singapore as well (Teh, 1999). It is ultimately safe to say that overall technology instruction is not consistent from school to school and even less from country to country. Teachers and trainers have not been prepared to effectively teach how to use or when to use technology.

Many times, students may have more knowledge of computer usage than the instructor. McBride goes so far as to say that "no teacher will be able to compete with the computer, and university professors may simply become, along with the World Wide Web, one more resource" in education. He continues, "Personableness will not be required, and might even become irrelevant (or a pedagogical value affordable only at the most elite institutions)" (2002:B5).

In an attempt to incorporate educators positively into educational technology, a Summer (2001) Institute of Instructional Technology was offered by the University of Minnesota, Crookston with Dr Dan Lim as professoriate. The Summer IT (Instructional Technology) Institute became a case study for me as I found the experience distinct in that (to the best of my knowledge) it was a first attempt to train teachers in instructional technology on an international level.

BACKGROUND

Dr Dan Lim's teaching style is based on the Chinese saying, "What I hear, I forget; what I see, I remember; what I do, I understand." He claims, "Learning by doing and experiencing is a lot more feasible and productive when highly interactive learning technologies are well integrated into the curriculum."[3]

Philosophical Framework

The underlying philosophical framework for the Summer Institute of Instructional Technology was to use a constructivist learning environment to help participants apply technology integration and develop authentic and well integrated learning objects. A "guided" constructivist learning environment transformed "the role of the learner from receiver (classic, communications conception of learners) to producer, creator, and sender" (Jonassen, 2002: 24). The major learning outcomes of courses were to empower the participants to create technology-based learning products that were authentic and had strong contextual integration.

Modelling of technology integration was a vital component of designing the summer institute courses. The intent was that the participants would emulate the use of highly interactive technologies demonstrated and experienced throughout the duration of the

[3] Dan has said and written this statement many times over.

courses. Jonassen points out that when technology is used as a constructivist learning tool, it "can help to transform learning and learners – to help them to become independent, self-regulated, life-long seekers and constructors of knowledge" (2000: 25). DeCaprariis agrees that "Jonassen's point – that students who take charge of their own education, who are no longer assimilating "canned" instruction, and are thus able to construct their own version of reality – is worth considering" (2000: 41).

Origin

After giving a keynote address at a national symposium on technology in Singapore, 2000, Dan Lim was asked to teach technology integration courses to help train sixty Educational Technology Champions from among 1200 educators at the Institute of Technical Education (ITE) of Singapore. The Institute enrolled about 18,000 students each year. The administration of the Institute was embarking on a five-year technology master plan to provide web-based learning for on-campus and off-campus students in Singapore. The proposed sixty trained Educational Technology Champions would be the critical core group helping to train the entire faculty to adopt and develop online courseware. Since the administration of the Institute wanted to model the philosophy, instructional design, and technology integration integrated at the University of Minnesota, Crookston (UMC), Dan proposed the concept of the Summer Institute of Instructional Technology to be held at UMC. At the end of the training period, the participants who successfully completed the course requirements would receive Instructional Technology Certification from UMC.

Rationale & Concept

The concept of a 2001 Summer Institute of Instructional Technology was conceived to meet the proposed needs and requirements for training selected faculty to become educational technology champions for both Singapore and Minnesota. The main rationale for conducting the summer institute was to train a core group of "trainer" educators who would in turn help train other educators to integrate technology into the teaching curriculum. An onsite hands-on training of five weeks during the summer on instructional design, development, and technology integration would provide the participants a total "immersion" of industrial standards and emerging instructional technologies. Completing all course assignments, projects, and other requirements online and at a distance would provide the participants with the authentic experience of learning, managing, troubleshooting, and interacting in a "faceless" "paperless" environment

Planning

The process of organizing and preparing for the summer institute took about six months. Content analysis was conducted on Singapore and Minnesota participants. The selected

course contents were integrated into six courses – Introduction to Instructional Technology, Instructional Design & Development, Graphics & Interface Design for Courseware, Courseware Development & Management, Computer-Based Instruction & Training, and Curriculum Integration of Technology. A thorough learner analysis was conducted among the participants and their background, experience, motivation, and reading levels were taken into consideration in designing and developing the courses. The logistics of providing laptops, software, logins, and WebCT set up took about a week to complete for all participants.

Expectations

Expectations of this pilot study (2001 Summer Institute of Technology) were secondary to student expectations. Participants wanted to be responsible for constructing their own learning experiences and development using the learning opportunities, collaboration with peers, technology resources, facilitation, and support provided by the instructor. If the students met their own expectations in effectively using instructional technology in the classroom, the pilot institute would be considered successful. Expectations of the institute developers were high in that each student was expected to be highly skilled in teaching his or her courses using WebCT at the end of the session.

Limitations

Limitations of the study were that the group was comprised of only fourteen hand-selected members who were of varying educational backgrounds. All had some prior knowledge of using the computer in the classroom. All students were instructors at the onset with various backgrounds and interests in technology.

DESIGN AND DELIVERY

U.S. and Singapore participants in the 2001 Summer Institute of Instructional Technology achieved the intended learning outcomes through (a) the modelling of technology integration, (b) a constructivist learning environment, (c) collaborative learning, (d) problem-based learning, and (e) the experience of online learning.

Modelling of Technology Integration

The first method used to achieve the intended learning outcomes was the modelling of technology integration with a Learning Management System. Learning Management Systems (systems developed especially for students and educators to teach and learn using a computer) are fairly new to the educational system. The Learning Management System used in the Summer Institute of Instructional Technology at the University of Minnesota, Crookston during the summer of 2001 was WebCT. Although there are other systems, WebCT was modelled and integrated in this global Instructional Technology Certification Summer Institute offered through the University of Minnesota.

WebCT was modelled (along with the regular offerings of the system) in each course through the use of highly interactive web-based learning applications and games authored in Flash and Toolbook. WebCT offers 24/7 (24 hours a day, 7 days a week at any location) training as long as Internet is available.[4]

PC Shoot-Out Chronicle (July, 2001) evaluates LMS (Learning Management Systems) based on needs of a company, then broadens "analysis to address how the products would fare in a variety of organizational scenarios" where academia could be included. The article by no means covers the entire territory of learning management systems or the various organizations that use them. However, the article does state, "The time is ripe for distributed learning. The Internet has provided an effective vehicle for anytime/anyplace training and standards for content and delivery are coming together." A learning management system offers consistent standards for content and delivery, even if the students, courses and instructors are varied.

In February of 1999, it was reported that WebCT had been used for 49 months and accordingly had "sold over 1200 licenses to institutions in over 33 countries." and that the renewal rate was "approximately 90%" (http://www.marshall.edu) and "a license can range from one course to 1000 or more." It was roughly estimated that 2 million students were using WebCT. Although other learning management systems were available, WebCT rated high (according to http://fdc.uwsuper.edu) when compared to Learning Space and Blackboard. WebCT structure has one major area of learning (while other LMS models have more) with a large number of choices for instructor structuring. WebCT has a virtual chat function, which allows real time communication plus chat rooms and email. With WebCT the instructor is able to create several groups. WebCT grades can also be easily imported into an Excel spreadsheet where the other models cannot do this.

Comparison of Online Course Delivery Software Products compared four learning management systems (http://www.marshall.edu) and rated WebCT with an average score in **overall tool features**, second in **email personal messaging**, first in **overall administration**, first in **administration—quizzes and tests**, and **NUMBER ONE** in **overall average.**

Learning Management Systems are being used widely. Instructors are continually evaluating the LMS platforms, but the one platform that the 2001 ITC Summer Institute students learned well was WebCT and to use one well offers confidence and comfort in adapting to other systems of similar purpose. [5]

---

[4] It is argued that business is ahead of academia in technological education. I mention this as the studies following were done for industrial companies.

[5] It is of no purpose to recommend any LMS system over another in this work. WebCT is discussed here as *one* viable system for technology integration.

Constructivist Learning Environment

Constructivism is a newer philosophy in education. In the constructivist perspective knowledge is constructed by the individual through his or her interactions with the environment. Constructivists generally claim that knowledge is not objective, nor discovered. Educators and authors are actively engaged in using constructivist principles to design and implement new learning environments.

Murphy (1997) compares Constructivism to the Socratic Method. The comparison indicates that each promotes critical thinking. Therefore, though Constructivism is a newer philosophy, many of the epistemological ideas have been with us for centuries. In essence, if educators believe that learners actively construct knowledge in an attempt to make sense of the environment, then learning will develop a meaning and understanding for the student. Let me explain further with another comparison.

I would compare Constructivism to a little known philosophy known as "process philosophy' that was born of the educational philosopher Alfred North Whitehead and introduced to me in a text by Kathleen Gershman and Donald W. Oliver entitled *Education, Modernity, and Fractured Meaning: Toward a Process Theory of Teaching and Learning* (1989).

Process philosophy professes that all things are in process. Nothing is stagnant. As we learn, things change and we must adapt to these changes. Process philosophy leans toward the constructivist philosophy, but examines change itself rather than the context (as Constructivists would examine). Process philosophy explains that we should expect and be alert to change, yet enjoy the process of the changes before us.

Constructivists would examine the context in relationship to the learner. The Constructivist would then investigate how the learner would adapt to the context in order to attain meaning, association and understanding from it. It follows that in instructional technology, the learner would then be able to use the content meaningfully and with intent.

Constructivism and Process Philosophy both give license to enjoy the journey of learning and the anticipation of arriving at a meaning or goal. In Instructional Technology, both Constructivists and Process Philosophers would stress the importance and joy of each of the main steps it takes to become masterful in a technique, yet realize that there will always be more steps and more learning to master.

The message is that all things are in process and should never be expected to remain the same, yet we can enjoy examination and the countless things we learn as we investigate.

Thus, the individual in ITC experienced learning in an individual way as was expected. Each person, besides being from an East or West culture, came from a rich and unique educational environment of his or her own, accounting for individualistic cultures. Instructional Technology was used individually as constructed by each for each

individual class or course need in accordance with the student/teacher expectation.

Modelling – "catching"

There are two important reasons why technology integration would be modelled in teacher technology training courses. First, the nature of the program requires a certain degree of technology integration. It is more effective to convince the participants to integrate technology into their teaching when they see and experience a high degree of technology integration themselves. When they are excited by the high degree of technology integration, they are more likely to use technology when they return to the classroom. Secondly, students tend to teach the way they are taught. Modelling technology in the courses will subtly help them carry it over to their teaching career. Compelling software, highly interactive web-based technologies, and collaborative learning systems were integrated into the courses at the 2001 Institute of Technology. Technology modelling was implemented through the use of Toolbook Instructor, Macromedia Flash, Adobe PhotoShop, Adobe Illustrator, Webcrossing, WebCT, and other software. Dan Lim used these software programs to provide participants with visuals and interface, interactive learning objects, and a single convenient interface for all courses.

Constructivism- "experiencing"

As most learners learn constructively with most hands-on tasks, Dan Lim determined that it would make sense to create a constructivist learning environment for all courses in the Summer Institute of Instructional Technology. During the on-site hands-on classes, participants practiced using various software to create learning applications. Visual tutorials and virtual labs were provided to help participants to self-learn or review. When participants completed all projects and course requirements, they would have "experienced" technology integration in a constructivist learning environment by being in the program, practicing, creating, troubleshooting, and producing interactive learning products for their students. During the six months of online learning, participants actively participated in WebCT bulletin boards answering questions posted by the instructor and exchanging views with fellow participants. Students posted daily (5 times per week) logs documenting their struggle, progress, troubleshooting, and reflections. Dan says, "It was very rewarding to see participants responding to each others' logs affirming ideas and helping each other out."[6] Clearly, while a constructivist approach provided individual experiential learning, the 2001 ITC Summer Institute encouraged collaborative learning as well.

Collaborative Learning--"doing"

[6] This was especially affirming to me. When I was lost, I would read fellow student logs and their answers would ultimately shed light on the discussion.

BEST COPY AVAILABLE

One thing that may be found in the midst of the Constructivist approach is that students, parents and administrators may have a difficult time understanding the role of the instructor. It was noted in class that when using the Constructivist approach, "It may look as if the teacher is not doing his or her job."[7] This may be especially evident if the participants are from a Behavioral background and have not been introduced to alternative approaches in education.

To the contrary, a teacher may be working harder in Constructivism. The instructor's job is to be a facilitator who is extremely busy and has done a great deal of preparation and has to have a wealth of knowledge to accommodate the many levels of experience that a student is having.

Dr Dan Lim as the facilitator in the ITC experience in the ITC Summer Institute, 2001 offered the class countless opportunities to work in groups. There was constant buzzing where one student would help another. Advanced technologists were assigned to be involved with the individualized projects occurring in the classroom.

Each student presented material at the end of each of the five weeks as a group performance. The group was then offered the chance to give feedback on the performance and/or to ask questions. Suggestions were constantly offered to the class by class members to aid in projects. Material was presented by the facilitator in conjunction with hands-on experiences by the student. While experimenting with the instructional tool, students learned from students as well as from the instructor or the text.[8]

At the ITC Summer Institute, the varied levels and backgrounds were extremely helpful. If one student were not able to complete a task, another would usually be able to aid. I was reminded of the saying, "You teach what you need to learn" or "One way to really learn something is to teach it." Once a student learned a task, he or she was ready to teach another. It worked. I am also reminded of the five-year-old children who are programming their grandparents VCRs. We all have the opportunity to share our learning in a collaborative way when it comes to instructional technology.

The 2001 ITC Summer Institute worked well and the students were able to aid each other in a meaningful way, even when the cultures and experiences were so varied. With sharing, problems were more easily solved.

Problem Based Learning -- "doing"

---

[7] This was actually said by Dan himself as he explained the constructivist approach. As a constructivist, I sometimes "feel" the students thinking this, especially when I don't "give" answers to questions.

[8] My mother was a teacher from 1942 until 1981. I had opportunities to visit many of the schools where she taught while I was a youngster. I remember the one-room schoolhouse with great fondness. All eight grades worked together and helped each other. Most of the time the older, more advanced students were the leaders, but not always. The ITC experience has similarities.

BEST COPY AVAILABLE

Problems were abundant during the ITC Summer Institute and after. In class, assistance was available by the assistants from the computer centre, by the facilitator and by classmates. More problems arose when working on the "real world" projects that were assigned over the year after returning to the home environment.

The real world projects were mandatory. Students were to create websites, create lessons, teach enhanced computer courses, and teach or train students using WebCT, Computer Based Training (CBT) or Computer Based Instruction (CBI). These real world projects were true tests as each student now faced real live students and had to perform the normal course activities with instructional technology.

Assistance remained available through synchronous chats and asynchronous emails. The ITC facilitator answered questions directed at him. At times, links or examples were posted for all students in answer to one question directed at the facilitator. During synchronous chats, students chatted answering each other's questions and concerns.

Students logged daily and those logs revealed the personal concerns and trials that each student suffered or the ecstasies when problems were overcome.

The facilitator posted discussion questions for the students to answer. The questions were thought provoking, but information based and answers were also available to all class members. Many times the discussion questions were springboards for the weekly class chats. These chats were scheduled once a week in spite of the problem of time zones. The West students logged on at 9 p.m. while students in the East logged on in the coinciding morning.

All questions related to the problem-based real world projects that were being completed over the year. The Singapore students were developing and teaching real materials to real students at an institute in Singapore. The U.S. students were also teaching real students real courses for the University of Minnesota, Crookston.

Online Learning Experience –"doing"

By using the computer to learn, a student is investing the self in focusing on the subject at hand. It is impossible to be passive while using eye-hand coordination. The students at the 2001 Summer Institute of Instructional Technology learned by experience just how to use and how to teach using technology. In "doing" online learning, we learned online teaching

RESULTS

I, as a participant observer in the ITC Summer Institute, have achieved the learning outcomes of the ITC Summer Institute. I am comfortable teaching my composition course on Web CT and using the features it offers. I am now an Interactive Learning

BEST COPY AVAILABLE

Technologist.

From student sources (see Addendum), feedback indicates that the greatest challenge when using technology is the fact that technology does not always work. Students do like the chat, email and grade features. They also like the availability of the instructor.[9]

Feedback also indicates that I am teaching as I was taught and it is greatly effective. Students profess that they are more closely linked to others (collaborative learning) in the class. It was also reported that they were able to solve problems on their own (problem-based and constructivist learning). The students used the WebCT learning management system developed for students and educators and have experienced the integration of technology in the classroom, and they have also had the experience of online learning.

PEDAGOGICAL IMPLICATIONS

Plato (1952, 1956, 1987) indicated that Socrates' approach led to his downfall (and ultimate death) due to the self-doubt that individuals experienced in discussions with him (Socrates). Even when self-doubt exists due to unfamiliar methods, teachers should continue to maintain flexibility and look for new ways of approaching students with traditional subject matter. Instructional Technology is a non-traditional way of teaching.

SUMMARY

The ITC Summer Institute was designed to offer online learning experience that started in the classroom and then continued without the boundaries of walls. In the modelling of online learning, the ITC students were prepared to teach online. Online learning breaks through the barriers of ageism, sexism, racism or any of the other "isms". Online learning breaks thorough time and place barriers. Students are still allowed to hold jobs or care for their children as they attend "school." As evident from the 2001 ITC Summer Institute, classrooms can extend literally around the globe.

The influx of "non-traditional" part-time and older students indicates that lifelong learning is deemed desirable and many times necessary. Lion F. Gardiner (1994, ERIC #ED39441) states, "Research on student development, coupled with modern educational methods and quality improvement principles, can enable us for the first time in human history to educate all of the people to a high level." With online learning, it seems that all people should have an opportunity for diversified course learning at their fingertips. It is the learning by doing where teachers will be effectively prepared to offer these fingertip courses.

[9] These are the features that I like as a student and as a teacher.

BEST COPY AVAILABLE

"Fruit does not fall far from the tree," seems to pertain in this study. As a participant observer of the 2001 ITC Summer Institute, I (a) integrate technology into my composition course, (b) use the constructivist approach, (c) use collaborative learning, (d) use problem-based learning, and (e) give students the experience of online learning. My students do achieve the intended outcomes of the course and do have varying comments on my methods.

As a participant observer, I am in the position to share personal results of the ITC Summer Institute. All the results are not in. However, I have now completed teaching the Composition course online using WebCT. It went well. In fact, I was nominated by an online student and awarded the "Thank a Teacher Award"[10] through the main University of Minnesota campus.

CONCLUSION

Student feedback and literature suggest that the wave of education seems to be toward continual learning without the walls of a classroom. The outcomes of instructors from Singapore and from Crookston, Minnesota, USA who met at the Summer Institute for Instructional Technology (2001) suggest that the Internet may be the equalizer for East to meet West in meaningful academic interchange. Teachers should be willing to ride this wave of technological interchange by becoming involved with professional development in instructional technology. Instructors everywhere may find technology to be more facilitating than has been traditionally accepted.

I have Marshal McLuhan to thank for his visualization of the global village. He didn't call for a global classroom, but I see that global classroom in the present and more so in the future. I'm excited to be a participant.

RECOMMENDATIONS

Recommendations of this study are to investigate the methods used in teaching instructional technology at the Summer Institute of Instructional Technology 2001. The methods suggested are (a) to model technology integration, (b) to create a constructivist learning environment, (c) to incorporate collaborative learning into the classroom, (d) to allow problem-based learning, and (e) to give opportunities to experience online learning. The methods discussed can be used in any intercultural classroom and have been successfully incorporated by Dr Dan Lim's Summer Institute of Instructional Technology 2001 at the University of Minnesota, Crookston.

[10] This award was a BIG surprise for me. I am truly honoured. The award says, "In appreciation from your students for your teaching style, curriculum choice, evaluation technique or for the fact that you showed concern that your students learn." Other quips on the award are: "Great Class!" "Hard but fun!" "What a Challenge!"

BEST COPY AVAILABLE

Works Cited

"Comparison of online course delivery software products" (1997). Retrieved from the WorldWideWeb:http://www.marshall.edu/it/cit/webct/compare/benchmarktest.html

DeCaprariis, P. (2000). "Constructivism in online learning: A view from the science faculty." *Educational Technology, 40 (6), 41-45.*

Gardiner. Lion F. (1994). "Redesigning higher education. Producing dramatic gains in student learning." (ERIC Document Reproduction Service No.ED39441).

Grabe, Mark & Grabe, Cindy (2001). *Integrating technology for meaningful learning.* Boston, MA: Houghton Mifflin Company.

Jonassen, D. H. (2000). "Transforming learning with technology: Beyond modernism and post-modernism or whoever controls the technology creates the reality." *Educational Technology, 40(2), 21-25.*

"Learning Space, Blackboard, and WebCT: A comparison" (April, 2002). Retrieved from the World Wide Web:http://fdc.uwsuper.edu/comp.html.

McBride, Tom (May 31, 2002). "Curiously average: The way we teach now." *The Chronicle of Higher Education,* p. B5.

McLuhan, Marshall (1962). *The Gutenberg galaxy: The making of typographic man.* Toronto: University of Toronto Press.

McLuhan, Marshall (1964). *Understanding media: The extensions of man.* New York: Signet Books.

McLuhan, Marshall (1967). *The medium is the massage.* New York: Bantam Books.

McLuhan, Marshall, and Barrington Nevitt (1972) *Take today: The executive as dropout.* New York: Harcourt Brace Jovanovich.

Oliver, Donald W. & Gershman, Kathleen (1989). *Education, modernity, and fractured meaning: Toward a process theory of teaching and learning.* Albany: State of University of New York Press.

Plato. (1952). *Gorgias.* (W. C. Helmbold, Trans.). New York: Macmillan Publishing Company.

Plato. (1956) *Phaedrus.* (W. C. Helmbold & W.G. Rabinowitz, Trans.). New York: Macmillan Publishing Company.

BEST COPY AVAILABLE

Plato. (1987). *The Republic.* (D.Lee, Trans.). New York: Penguin Books.

PC Shoot-Out Chronicle (July 26, 2001). Retrieved from the World Wide Web: http://www/zdmet/cp,/products/stories/reviews/0,4161,23912382.html.

Seaver, Adonica (Schultz Aune) (1989). *Electronic learning: The marriage of composition and television.* Unpublished Master's Thesis, University of North Dakota.

Teh, George P. L. (1999) "Assessing Student Perceptions of Internet-Based Online Learning Environments." *International Journal of Instructional Media, Volume 26(4),* pp. 397-402.

The CIOS/McLuhan Site (February 26, 2001). Retrieved from the World Wide Web:http://www.cios.org/encyclopedia/mcluhan/m/m.html

"Why use WebCT when there are other good products available?" (1999). Retrieved from WorldWideWeb:http://www.marshall.edu/it/cit/webct/compare/whyusewebct.htm.

ADDENDUM[11]

In the fall of 2001 I taught a computer enhanced course, using WebCT within the classroom. I guided the students through the use of WebCT. It was new to them. They were freshman and most had not used computers inside the classroom before. None had used WebCT. I conducted a survey of the students following the course and this is what I found:

Nine of the students liked WebCT, 5 did not like it, and 3 had mixed feelings.

Q#1 - I asked what they liked most about WebCT:

"I like how it makes the class less formal. It keeps you informed with emails, and when you get into the chat rooms everyone is fair game to compliment and criticize."

"I liked being able to see my grade."

"You can chat with other classmates."

"I liked being able to see how other people communicate to their classmates who they don't really know that well. It was a fun experience."

"That all of the assignments are on there along with our mail and a calendar."

"I like that it adds another way to get ahold of your professor as well as giving you updated grades all of the time."

"I really liked that you can have all the information about a class in a web page. Things like your grades, assignment and the chat room."

"I like the chartroom and the announcements for commuting students, it's great, we can check to see if class is happening on stormy days and know what to bring."

"When you had the whole month's assignments on a calendar, you know what was going on."

For this question, I had only one negative, "I did not really like anything."

---

[11] I have separated my observation from Dan's observation in order for the readers to realize separate perspectives.

The grade posting was the feature that students liked the most.

In balance, I asked the students what they liked least. Here are some of the responses:

"Sometimes some of us could get on and others couldn't so you would waste lots of class time trying to get everyone on."

"Chat room."

"It's slow and may or may not be working correctly."

"I don't like logging on all the time and how the chat rooms only sometimes work."

"The WebCT, I don't think was necessary for us, and I had many problems starting to use it and understand it."

"The fact that it doesn't work half the time and the way it takes so long to load."

"I didn't like how slow the server was in the beginning of the year and when some people couldn't get into the chat room and others could."

As WebCT was having trouble on campus, I was not surprised to hear the previous complaints. Technology is "finicky" as one student stated.

Q#2 - I asked, "Has WebCT enhanced Composition I?" Ten answered yes, five answered no, and three were noncommittal.

Q#3 - I asked "Would you recommend other students to take Composition I using WebCT?" A surprising 14 answered yes, only one no, and three were noncommittal.

Q#4 - "Are you satisfied with WebCT services?" was my next question. Eight answered yes, six answered no, and three were noncommittal.

Q#5 - I asked, "Was WebCT useful in the Composition course you just completed?" 12 said yes, 2 said no, and 3 were noncommittal.

Q#6 - I asked, "What is your general attitude towards Instructional Technology?"

"I think it will be the new way of learning in the future. It's a great idea and will help students get out of the original class room."

"I think it is good because the times are changing and we have to change with it."

"It's awesome."

"I think it is very useful and should be used more often. Total use would be better."

"It is a good way to learn from others along with the instructor."

"It is great."

"Don't mind it."

"I think it has the potential to become very popular, but so far I think it needs some work."

"It makes the course run more smoothly."

"It can get those people who like to learn on computers to learn better, and find some of those who don't really know which way is the best for you to learn."

"I don't really care for it."

"Less is more."

"Positive."

"Good, it can be a useful tool if it ever works right."

"I think to many people it is very advantageous. It definitely has its benefits if fully utilized."

"I like technology and I think it makes everything easier for us."

"Good and bad. Everything is computerized today. Students need knowledge of technology. However, it sometimes takes the place of student/teacher interaction."

The most telling information came from one student who said early in the year:

"This WebCT is kind of confusing. I'm not really sure if I like it or not. I guess we'll have to see if everyone can get on and then it might be a little better. I felt kind of bad last time when others couldn't get on. They just sat and watched us type back and forth. Some people's computers still won't allow them to enter WebCT either."

She later said:

"I think the chat room in class is pretty cool. I like our class. The people are not stuck-up and talk to everyone for the most part. This is the only class I have that's like this with everyone talking. Some classes seem to have the predominant "clicks" that are very evident in high school settings, but I've found some still exist in college, just not to the

same intensity."

Later she went on with:

"I don't think this is a bad class at all. Some of the assignments are confusing though. Looking in your book and online help links help out though. If your (sic) confused you can usually figure out what's happening by asking others, going to references, or online exploring online. Some students just don't ask for help, or don't show up for class and those are the ones who aren't up to par with their grades."

The same student shared her journal again after attending a class that did not use WebCT. She attended another class as she had a conflict. My other class did not use WebCT. She said, "Today I was in the 10am (sic) class instead of my regular 2pm (sic) class. The atmosphere was very different! I like my 2 o'clock class a lot better and I partly think it's to do with WEB CT. That program seems to make everyone more open. It helps out so classroom isn't so formal and uninviting. Using this program makes you want to come to class more than just the normal class setting. It helps you figure out what your classmates are like too. It's a great way to learn about your piers (sic)."

One more comment that came in a journal entry from my enhanced WebCT course was, "This is the only class where we discussed the 9-11 incident." I am sure many classes have discussed the World Trade Center incident since this time. However, we had the reports flying onto our computers as we were working and as the incident was developing. It entered the discussion and has since brought to my attention how immediate and important it is to have world connections at our fingertips.

Dan's Observations

Dan Lim observed a great change of attitude towards the constructivist learning approach, especially among the Singaporean participants who claimed that constructivism would never work in Singapore. Throughout the duration of the distance mode of learning, participants became more self-reliant in using and troubleshooting technology. As all course projects were derived from their workplace, all participants had used what they created in at least one class. Many went beyond the instructor's expectations. Another exhilarating moment was seeing participants emulating the way technology was modelled in their course projects and teaching experience, especially online teaching. There were several downsides: technical support was not adequate for Singapore participants; a variety of examples (of various disciplines) were not available; six months could not do justice to the required course projects. Here are some excerpts from the daily logs of the participants:

"One of Dr Lim's assignments was to write a paper on what we had learned as constructivist online educators. My paper was accepted for a national conference."

"The good news is that I have made progress and my progress is documented by my class

BEST COPY AVAILABLE

journaling (very good thing to use in any class). I smile as I continue to search for that pot of gold at the end of the rainbow. I feel a little like Dorothy, from *The Wizard of Oz*, taking one step at a time on the yellow brick road journeying toward the wizardly wisdom of ITC."

"I did a kind of 'soul searching' after reading Dr Dan's reply. What struck me most was the phrase 'learning context' mentioned. I had another look at my task analysis and task structure plan and finally managed to come up with not one but six learning frames for my first subtask of my first LO (learning object) . . . As usual there was an initial struggle. I did not seem to know where I was heading until my wife pointed out that our son was not learning his spelling. It struck me that he was not enjoying the normal practice of rote learning. I devised a simple game of matching, words scrambling, word arrangement and fill-in the blanks of spelling words. They were the same words put in different 'situations.' I began to appreciate the need to 'overteach'. In no time my son was able to learn his spelling well. When I started to work on learning frames for the first subtask, I realized the need for a 'learning context' in my CBI development."

"Browsed the content put up by . . . in ITC540. Attempted some of his quizzes and test. It was interesting and exciting going through the course. . . . has done a good job in ensuring that the students stay on his course. Well done, . . . Hopefully I can create a module as excellent as his."

"Prepared answers for the questions posted in the discussions. Questions in the discussion were very useful for me to recap and reflect on my personal experiences and thoughts while going though the module."

BEST COPY AVAILABLE

CS 511 690

U.S. Department of Education
Office of Educational Research and Improvement
(OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

Reproduction Release

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: The McLuhan Global Classroom: A Singapore-U.S. One Year Instructional Interaction	
Author(s): Adanica Schultz Aune and Dan Lim	
Corporate Source: University of North Dakota	Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
Level 1	Level 2A	Level 2B
↑ [X]	↑ [ ]	↑ [ ]
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) *and* paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproducti and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

Reproduction Release

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Adonica Schultz Aune, Ph.D	Printed Name/Position/Title: Adonica Schultz Aune, Ph.D.	
Organization/Address: School of Communication UND P.O. Box 7169 Grand Forks, ND 58201	Telephone: 701-746-9917	Fax: 701-777-3090
	E-mail Address: adonica.schultz@und.nodak.edu	Date: 1/9/03

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse: